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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,187	01/21/2004	Kia Silverbrook	MPA03US	2157

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SILVERBROOK RESEARCH PTY LTD
393 DARLING STREET
BALMAIN, NSW 2041
AUSTRALIA

EXAMINER	
DO, AN H	

ART UNIT	PAPER NUMBER
2853	

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

E/L

Office Action Summary	Application No.	Applicant(s)	
	10/760,187	SILVERBROOK ET AL.	
	Examiner	Art Unit	
	An H. Do	2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 January 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 6-12* is/are rejected.

7)☒ Claim(s) *4 and 5* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 January 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/03/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 03 November 2004 was filed and is being considered by the examiner.

Specification

2. The abstract of the disclosure is objected to because the term "comprising" in the first line should be changed to --including-- or --having--. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3 and 6-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Silverbrook (US 6,409,323).

Silverbrook discloses the following claimed limitations:

Regarding claim 1, a printhead module (Figures 1-6) for a printhead assembly (11), comprising at least two printhead integrated circuits (print chips 27), each of which has nozzles (30) formed therein for delivering printing fluid onto the surface of print media, a support member (chassis 10) supporting the printhead integrated circuits (27) and at least two fluid distribution members (Figure 6, elements 35, 36) individually mounting a respective one of the at least two printhead integrated circuits (27) to the

support member, wherein the support member (chassis 10) has at least one longitudinally extending channel (Figures 9A and 9B, element 61) for carrying the printing fluid for the printhead integrated circuits (27) and includes a plurality of apertures (53) extending from the at least one channel through a wall of the support member, and each of the fluid distribution members is formed as a laminated stack of layers (laminated stack 36, column 2, lines 34-38) for directing the printing fluid from the apertures (53) of the support member to the nozzles (30) of the associated printhead integrated circuit (27).

Regarding claim 2, wherein the at least two printhead integrated circuits (print chips 27), the support member (chassis 10) and the at least two fluid distribution members (35, 36) are formed as a unitary arrangement with an electrical connector (24) for connecting electrical signals to the at least two printhead integrated circuits (27).

Regarding claim 3, wherein each laminated stack comprises at least three layers comprising an upper layer (Figure 9a, element 52, column 6, lines 40-45) upon which the associated printhead integrated circuit (27) is mounted, a middle layer (Figure 9a, element 56) and a lower layer (Figure 9a, element 60, column 6, lines 58-67) which is attached to an upper surface of the support member so as to direct the printing fluid from the apertures (53) of the support member to the nozzles (30) of the associated printhead integrated circuit (27).

Regarding claim 6, wherein the printhead module is arranged to be removably mounted to the printhead assembly (column 2, lines 19-23).

Regarding claim 7, wherein the support member is formed with a plurality of the channels (61), each of which is arranged to carry a different printing fluid for direction to associated groups of the nozzles in the both, or if more than two, all of the printhead integrated circuits (27) by way of respective ones of the fluid distribution members.

Regarding claim 8, wherein the support member is formed with a further channel (air duct 41) for delivering air to the at least two printhead integrated circuits (27) for maintaining the nozzles of the at least two printhead integrated circuits substantially free from impurities.

Regarding claim 9, wherein lower surfaces of the fluid distribution members are attached to the upper surface of the support member by an adhesive material (Figures 9a and 9b, column 7, lines 22-26).

Regarding claim 10, wherein the adhesive material is deposited to form a gasket which surrounds each of the apertures of the support member and each of corresponding apertures formed in the lower surfaces of the fluid distribution members so as to form a seal between the respective apertures (Figures 9a and 9b, column 7, lines 45-50).

Regarding claim 11, wherein: the apertures (53) of the support member (chassis 10) are formed in a row extending across the support member with respect to the longitudinally extending direction of the support member (Figures 12-17, column 6, lines 46-48); and two deposits of the adhesive material are deposited on either side of the row of apertures to provide stability for the mounting arrangement (column 7, lines 22-26).

Regarding claim 12, wherein the adhesive material is a curable resin (Acetal type material, column 7, line 23).

Allowable Subject Matter

5. Claims 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The primary reason for the allowance of claims 4 and 5 is the inclusion of the limitation of a printhead module for a printhead assembly that includes a laminated stack distribution layers that the middle layer has smaller apertures than the apertures of the lower layer, and the upper layer has smaller apertures than the apertures of the middle layer. It is this limitation found in the claims, as it is claimed in the combination of, that has not been found, taught or suggested by the prior art of record which makes these claims allowable over the prior art.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Anderson et al (US 4,883,219) and Miyazawa et al (US 5,963,234) disclose a laminated printhead structure having a plurality of bonded layers.

Contact Information

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to An H. Do whose telephone number is 571-272-2143. The examiner can normally be reached on Monday-Friday (Flexible).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AD
February 13, 2006

An H. Do
Examiner
Art Unit 2853